



COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

NORTHERN REGIONAL OFFICE

13901 Crown Court, Woodbridge, Virginia 22193

(703) 583-3800

www.deq.virginia.gov

Molly Joseph Ward
Secretary of Natural Resources

David K. Paylor
Director

Thomas A. Faha
Regional Director

August 15, 2016

Mr. Joseph R. Daniel
President
Culpeper Wood Preservers
P.O. Box 1148
Culpeper, VA 22701

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Re: Reissuance of VPDES Permit No. VA0090468
Culpeper Wood Preservers – Ruffin Creek
Spotsylvania County

Dear Mr. Daniel:

The Department of Environmental Quality (DEQ) has approved the enclosed effluent limitations and monitoring requirements for the above-referenced permit. Copies of your permit and fact sheet are enclosed.

A Discharge Monitoring Report (DMR) form is no longer included in the reissuance package since you are already enrolled in DEQ's electronic DMR (e-DMR) program. The first electronic DMR submittal for the fourth calendar quarter of 2016 is due by January 10, 2017. Please reference the effluent limits in your permit and report monitoring results in e-DMR to the same number of significant digits as are included in the permit limits for the parameter. The regional contact for e-DMR is Rebecca Vice; she can be reached at (703) 583-3922 or by e-mail at rebecca.vice@deq.virginia.gov.

As provided by Rule 2A:2 of the Supreme Court of Virginia, you have thirty days from the date of service (the date you actually received this decision or the date it was mailed to you, whichever occurred first) within which to appeal this decision by filing a notice of appeal in accordance with the Rules of the Supreme Court of Virginia with the Director, Department of Environmental Quality. In the event that this decision is served on you by mail, three days are added to that period.

Alternately, any owner under §§ 62.1-44.16, 62.1-44.17, and 62.1-44.19 of the State Water Control Law aggrieved by any action of the State Water Control Board taken without a formal hearing, or by inaction of the Board, may demand in writing a formal hearing of such owner's grievance, provided a petition requesting such hearing is filed with the Board. Said petition must meet the requirements set forth in §1.23(b) of the Board's Procedural Rule No. 1. In cases involving actions of the Board, such petition must be filed within thirty days after notice of such action is mailed to such owner by certified mail.

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Final Permit to Facility
August 15, 2016
Page 2 of 2

If you have questions about the permit, please contact Anna Westernik at anna.westernik@deq.virginia.gov or 703-583-3837.

Respectfully,



Bryant Thomas
Regional Water Permits & Planning Manager

Enc.: Permit for VA0090468
Fact Sheet for VA0090468

cc: DEQ-Water, OWPP
EPA-Region III, 3WP12
Department of Health, Culpeper



COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

Permit No. **VA0090468**
Effective Date: **September 1, 2016**
Expiration Date: **August 31, 2021**

AUTHORIZATION TO DISCHARGE UNDER THE VIRGINIA POLLUTANT DISCHARGE ELIMINATION SYSTEM AND THE VIRGINIA STATE WATER CONTROL LAW

In compliance with the provisions of the Clean Water Act as amended and pursuant to the State Water Control Law and regulations adopted pursuant thereto, the following owner is authorized to discharge in accordance with the information submitted with the permit application, and with this permit cover page, Part I – Effluent Limitations and Monitoring Requirements, Part II – Conditions Applicable To All VPDES Permits and Part III – Stormwater Management, as set forth herein.

Owner Name: Culpeper Wood Preservers – Ruffin Creek
Facility Name: Ruffin Creek Properties, LLC
County: Spotsylvania
Facility Location: 10299 Tidewater Trail, Fredericksburg, VA 22408

The owner is authorized to discharge to the following receiving stream:

Stream Name: Ruffin Pond
River Basin: Rappahannock River
River Subbasin: Lower Rappahannock River
Section: 4
Class: III
Special Standards: None

A handwritten signature in blue ink, appearing to read "Thomas A. Faha".

Thomas A. Faha
Director, Northern Regional Office
Department of Environmental Quality

August 15, 2016
Date

A. Effluent Limitations and Monitoring Requirements**1. Outfall 001 – Stormwater Flow from Lumber Storage**

- a. There shall be no discharge of floating solids or visible foam in other than trace amounts.
- b. During the period beginning with the permit's effective date and lasting until the expiration date, the permittee is authorized to discharge from Outfall Number 001. Such discharges shall be limited and monitored by the permittee as specified below.

Parameter	Discharge Limitations				Monitoring Requirements	
	Monthly Average ⁽¹⁾	Weekly Average ⁽¹⁾	Minimum	Maximum ⁽¹⁾	Frequency	Sample Type
Flow (MGD)	NL	NA	NA	NL	1/3M ⁽²⁾	Estimate
pH (S.U.)	NA	NA	6.0	9.0	1/3M ^(2,)	Grab
Hardness, Total (mg/L as CaCO ₃)	NA	NA	NA	NL	1/3M ^(2, 3)	Grab
Dissolved Copper (µg/L)	NA	NA	NA	NL	1/3M ^(2, 3, 4, 5, 8)	Grab
Total Kjeldahl Nitrogen, TKN (mg/L)	NA	NA	NA	NL	1/6M ^(5, 6, 10)	Grab
Nitrate+Nitrite, as N (mg/L)	NA	NA	NA	NL	1/6M ^(6, 10)	Grab
Total Nitrogen (mg/L)	NA	NA	NA	NL	1/6M ^(6, 7, 8, 10)	Calculated
Total Phosphorus (mg/L)	NA	NA	NA	NL	1/6M ^(6, 8, 10)	Grab
Total Suspended Solids (mg/L)	NA	NA	NA	NL	1/6M ^(5, 6, 9, 10)	Grab
Acute Toxicity – <i>C. dubia</i> (%)	NA	NA	NA	NL	1/YR ^(3,11, 12)	Grab
Acute Toxicity – <i>P. promelas</i> (%)	NA	NA	NA	NL	1/YR ^(3, 11, 12)	Grab

⁽¹⁾ See Part I.B.

⁽²⁾ The quarterly monitoring periods shall be January through March, April through June, July through September, and October through December. The DMR shall be submitted no later than the 10th day of the month following the monitoring period.

⁽³⁾ Dissolved copper, toxicity, and total hardness monitoring shall be conducted concurrently.

⁽⁴⁾ An action level of 9.2 µg/L for dissolved copper applies. See Part III for requirements pertaining to the applicable action level.

⁽⁵⁾ The following quantification levels are applicable: TSS 1.0 mg/L; TKN 0.50 mg/L; dissolved copper 1.8 µg/L.

⁽⁶⁾ The semiannual monitoring periods shall be January through June and July through December. The DMR shall be submitted no later than the 10th day of the month following the monitoring period.

⁽⁷⁾ Total Nitrogen = sum of TKN plus Nitrate+Nitrite.

⁽⁸⁾ See Part III of the permit for further additional requirements for stormwater discharges

⁽⁹⁾ TSS shall be expressed as two significant figures.

⁽¹⁰⁾ Monitoring and reporting are only required during the first two years of the permit term (i.e., four sampling periods).

⁽¹¹⁾ See Part I.C of this permit for Whole Effluent Toxicity (WET) requirements.

⁽¹²⁾ The annual monitoring periods shall be January 1 through December 31 of each year. The DMR shall be submitted no later than the 10th of January of the year following the monitoring activity.

MGD = Million gallons per day.

NL = No limit.

NA = Not applicable.

S.U. = Standard units.

1/3M = Once every three months.

1/6M = Once every six months.

1/YR = Once every year.

Estimate = Reported flow is to be based on the technical evaluation of the sources contributing to the discharge.

Grab = An individual sample collected over a period of time not to exceed 15-minutes.

A. Effluent Limitations and Monitoring Requirements**2. Groundwater Monitoring**

During the period beginning with the permit effective date and lasting until the permit expiration date, groundwater monitoring shall be conducted at MW-4, MW-6, MW-8, MW-10 or those groundwater monitoring wells determined by a revised Groundwater Monitoring Plan.

Parameter	Monitoring Requirements		
	<u>Limitation</u>	<u>Frequency</u>	<u>Sample Type</u>
Static Water Level (ft./in.) (Measured to the Nearest 0.01 ft.)	NL	1/YR	Measured
pH (S.U.)	NL	1/YR	Grab
Conductivity (µmhos/cm)	NL	1/YR	Grab
Total Copper (µg/L)	NL	1/YR	Grab

Static Water Level = The static water level shall be measured prior to bailing the well water for sampling. At least three volumes of groundwater shall be withdrawn immediately prior to sampling each monitoring well.

NL = No limit; monitor and report.

S.U. = Standard Units.

Grab = An individual sample collected over a period of time not to exceed 15-minutes.

B. Quantification Levels and Compliance Reporting

1. Quantification Levels

- a. The quantification levels (QL) shall be less than or equal to the following concentrations:

<u>Characteristic</u>	<u>Quantification Level</u>
Total Copper	1.8 µg/L
TSS	1.0 mg/L

- b. The QL is defined as the lowest concentration used to calibrate a measurement system in accordance with the procedures published for the method. It is the responsibility of the permittee to ensure that proper quality assurance/quality control (QA/QC) protocols are followed during the sampling and analytical procedures. QA/QC information shall be documented to confirm that appropriate analytical procedures have been used and the required QLs have been attained. The permittee shall use any method in accordance with Part II A of this permit.

2. Compliance Reporting for parameters in Part I.A

- a. Monthly Average – Compliance with the monthly average limitations and/or reporting requirements for the parameters listed in Part I.B.1.a of this permit condition shall be determined as follows: All concentration data below the QL used for the analysis (QL must be less than or equal to the QL listed in Part I.B.1.a above) shall be treated as zero. All concentration data equal to or above the QL used for the analysis shall be treated as it is reported. An arithmetic average shall be calculated using all reported data for the month, including the defined zeros. This arithmetic average shall be reported on the Discharge Monitoring Report (DMR) as calculated. If all data are below the QL used for the analysis, then the average shall be reported as "<QL". If reporting for quantity is required on the DMR and the reported monthly average concentration is <QL, then report "<QL" for the quantity. Otherwise, use the reported concentration data (including the defined zeros) and flow data for each sample day to determine the daily quantity and report the monthly average of the calculated daily quantities.
- b. Daily Maximum - Compliance with the daily maximum limitations and/or reporting requirements for the parameters listed in Part I.B.1.a of this permit condition shall be determined as follows: All concentration data below the QL used for the analysis (QL must be less than or equal to the QL listed in a. above) shall be treated as zero. All concentration data equal to or above the QL used for the analysis shall be treated as reported. An arithmetic average shall be calculated using all reported data, including the defined zeros, collected within each day during the reporting month. The maximum value of these daily averages thus determined shall be reported on the DMR as the Daily Maximum. If all data are below the QL used for the analysis, then the maximum value of the daily averages shall be reported as "<QL". If reporting for quantity is required on the DMR and the reported daily maximum is <QL, then report "<QL" for the quantity. Otherwise, use the reported daily average concentrations (including the defined zeros) and corresponding daily flows to determine daily average quantities and report the maximum of the daily average quantities during the reporting month.
- c. Single Datum - Any single datum required shall be reported as "<QL" if it is less than the QL used in the analysis (QL must be less than or equal to the QL listed in Part I.B.1.a above). Otherwise, the numerical value shall be reported.
- d. Significant Digits - The permittee shall report at least the same number of significant digits as the permit limit for a given parameter. Regardless of the rounding convention used by the permittee (i.e., 5 always

rounding up or to the nearest even number), the permittee shall use the convention consistently, and shall ensure that consulting laboratories employed by the permittee use the same convention.

- e. For total phosphorus (TP), all daily concentration data below the quantification level (QL) for the analytical method used should be treated as half the QL. All daily concentration data equal to or above the QL for the analytical method used shall be treated as it is reported.
- f. For total nitrogen (TN), if none of the daily concentration data for the respective species (i.e. TKN, Nitrates/Nitrites) are equal to or above the QL for the respective analytical methods used, the daily TN concentration value reported shall equal one half of the largest QL used for the respective species. If one of the data is equal to or above the QL, the daily TN concentration value shall be treated as that data point is reported. If more than one of the data is above the QL, the daily TN concentration value shall equal the sum of the data points as reported.

C. Whole Effluent Toxicity Program Requirements

1. Biological Monitoring

- a. In accordance with the schedule in Part I.C.2 below, the permittee shall conduct annual acute toxicity tests for the duration of the permit. The permittee shall collect grab samples of the effluent at Outfall 001.

The acute tests to use are:

48-Hour Static Acute Test using *Ceriodaphnia dubia*

48-Hour Static Acute Test using *Pimephales promelas*

These single dilution acute tests are to be conducted using a minimum of 4 replicates, with 5 organisms each, for the control and 100% effluent. The No Observed Adverse Effect Concentration (NOAEC) shall be reported as either equal to 100% (= 100%) or less than 100% (< 100%). The effluent will be in compliance if the survival of the test organisms in both the control and 100% effluent exposures equals or exceeds 90%. If the survival in the effluent is less than 90% and this value is significantly different from the control survival, as determined by hypothesis testing, the NOAEC is less than 100% and the effluent is not in compliance. Tests in which control survival is less than 90% are not acceptable.

- b. The permittee may provide additional samples to address data variability. These data shall be reported. Test procedures and reporting shall be in accordance with the WET testing methods cited in 40 CFR 136.3
- c. The test data will be evaluated statistically for reasonable potential at the conclusion of the test period. The data may be evaluated sooner if requested by the permittee or if toxicity has been noted. Should evaluation of the data indicate that a limit is warranted, a WET limit and compliance schedule will be required.
- d. The permit may be modified or revoked and reissued to include pollutant specific limits in lieu of a WET limit should it be demonstrated that toxicity is due to specific parameters. The pollutant specific limitations must control the toxicity of the effluent.

2. Reporting Schedule

The permittee shall monitor during the periods specified; shall report the results on the DMR; and shall supply one copy of the toxicity test report specified in this WET Program:

Period	Sampling Period	DMR/Report Submission Dates
Annual 1	April 1, 2017 – June 30, 2017	January 10, 2018
Annual 2	October 1, 2018 – December 31, 2018	January 10, 2019
Annual 3	July 1, 2019 – September 30, 2019	January 10, 2020
Annual 4	January 1, 2020 – March 31, 2020	January 10, 2021

D. Other Requirements and Special Conditions

1. Operation and Maintenance (O&M) Manual Requirement

In accordance with the Virginia Pollutant Discharge Elimination System Regulations at 9VAC25-31, the permittee shall submit a revised O&M Manual to the Department of Environmental Quality, Northern Regional Office (DEQ-NRO) reflecting current facility operations within 90 days of the permit effective date.

The O&M Manual and subsequent revisions shall include the manual effective date and meet Parts II.K.2 and II.K.4 Signatory Requirements of the permit. Any changes in the practices and procedures followed by the permittee shall be documented in the O&M Manual within 90 days of the effective date of the changes. The permittee shall operate the treatment works in accordance with the O&M Manual and shall make the O&M manual available to Department personnel for review during facility inspections. Within 30 days of a request by DEQ, the current O&M Manual shall be submitted to the DEQ-NRO for review and approval.

The O&M Manual shall detail the practices and procedures to be followed to ensure compliance with the requirements of this permit. This manual shall include, but not necessarily be limited to, the following items, as appropriate:

- a. Permitted outfall locations and techniques to be employed in the collection, preservation, and analysis of stormwater samples;
- b. Procedures for measuring and recording the duration and volume of stormwater discharged;
- c. Discussion of Best Management Practices;
- d. Procedures for handling, storing, and disposing of all wastes, fluids, and pollutants characterized in Part I.D.3 that will prevent these materials from reaching state waters. List type and quantity of wastes, fluids, and pollutants (e.g. chemicals) stored at this facility;
- e. Discussion of facility design, operation, routine preventative maintenance, critical spare parts inventory, and record keeping;
- f. List of facility, local and state emergency contacts; and
- g. Procedures for reporting and responding to any spills and/or overflows.

2. Notification Levels

The permittee shall notify the Department as soon as they know or have reason to believe:

- a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in this permit, if that discharge will exceed the highest of the following notification levels:
 - 1) One hundred micrograms per liter;
 - 2) Two hundred micrograms per liter for acrolein and acrylonitrile; five hundred micrograms per liter for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter for antimony;

- 3) Five times the maximum concentration value reported for that pollutant in the permit application; or
- 4) The level established by the Board.

b. That any activity has occurred or will occur which would result in any discharge, on a nonroutine or infrequent basis, of a toxic pollutant, which is not limited in this permit, if that discharge will exceed the highest of the following notification levels:

- 1) Five hundred micrograms per liter;
- 2) One milligram per liter for antimony;
- 3) Ten times the maximum concentration value reported for that pollutant in the permit application; or
- 4) The level established by the Board.

3. Materials Handling/Storage

Any and all product, materials, industrial wastes, and/or other wastes resulting from the purchase, sale, mining, extraction, transport, preparation, and/or storage of raw or intermediate materials, final product, by-product or wastes, shall be handled, disposed of, and/or stored in such a manner and consistent with Best Management Practices, so as not to permit a discharge of such product, materials, industrial wastes, and/or other wastes to State waters, except as expressly authorized.

4. Water Quality Criteria Reopener

Should effluent monitoring indicate the need for any water quality-based limitations, this permit may be modified or alternatively revoked and reissued to incorporate appropriate limitations.

5. Chemical Treatment

The permittee shall notify the DEQ Northern Regional Office 90 days prior to use of any new wood treatment chemicals. Upon notification, the Regional Office shall determine if this activity warrants a modification of the permit.

7. Handling and Storage of Treated Lumber

- a. Treated lumber stored under roof shall be retained on the drip pad for at least 12 hours after treatment or until it there is no visible drippage. Treated lumber that is to be stored uncovered shall be retained on the drip pad after treatment for at least 48 hours to ensure there is no visible drippage before it is removed from the drip pad and stored uncovered.
- b. Within one year of the effective date of this permit, the permittee shall prepare and submit for approval a treated lumber management plan that will serve to prevent or reduce, to the extent practicable, the contact of exposed treated lumber with precipitation. This plan shall document available covered and uncovered lumber storage areas. Additionally the plan is to include average lumber residence times in the following locations: raw lumber storage, treatment and retention on the drip pad, and treated lumber storage. Once approved, this treated lumber management plan shall be incorporated into the O&M Manual and become an enforceable condition of this permit.
- c. A log summary that includes the process used to treat the wood (including volumes of chemicals used), the quantity of treated lumber stored, the storage duration, and the storage location shall be included in the plan. The log summary shall be retained on site for the duration of the permit term.

8. Process Wastewater Pollutants

There shall be no discharge of process wastewater pollutants. The term “process wastewater” specifically excludes material storage yard runoff (either raw material or processed wood storage).

9. Groundwater Monitoring

Groundwater monitoring at this site shall be conducted in accordance with Part I.A.2 of this permit and the approved Groundwater Monitoring Plan. Monitoring results shall be reported to DEQ with the electronic DMR due on the tenth of January of each year.

Within 90 days of the effective date of this permit, the permittee shall submit to the DEQ-NRO an approvable revised Groundwater Monitoring Plan. The purpose of this plan will be to determine if the system integrity is being maintained and to indicate if activities at the site are resulting in violations of the Board's Groundwater Standards. As a minimum, the plan shall contain the following sections:

- a. Introduction;
- b. Geologic Information;
- c. Monitoring Well Design and Installation (borehole and monitoring well records);
- d. Monitored Parameters and Sampling Frequency; and
- e. Sampling Protocol.

Once approved by DEQ, the Groundwater Monitoring Plan shall become an enforceable part of this permit.

10. Site Characterization Report

Should groundwater data warrant such, DEQ may require submittal of a site characterization report no later than 90 days after being notified by DEQ. This report shall be enforceable under the permit.

11. Corrective Action Plan Requirement

Following review and approval of a site characterization report, the permittee shall submit a corrective action plan to DEQ within 180 days of being notified of this requirement by DEQ. This plan shall be enforceable under the permit.

12. Closure Plan

Facility closure shall be conducted in accordance with the Closure Plan on file dated April 22, 2015 or any subsequent approved Closure Plan that supersedes the April 22, 2015 Closure Plan. All closure shall be coordinated with the DEQ Water Program Division and the DEQ Waste Division. Any changes in the practices and procedures for facility closure shall be documented in the Closure Plan within 90 days of the effective date of the changes.

13. Total Maximum Daily Load (TMDL) Reopener

This permit shall be modified or alternatively revoked and reissued if any approved wasteload allocation procedure, pursuant to Section 303(d) of the Clean Water Act, imposes wasteload allocations, limits or conditions on the facility that are not consistent with the permit requirements.

CONDITIONS APPLICABLE TO ALL VPDES PERMITS**A. Monitoring**

1. Samples and measurements required by this permit shall be taken at the permit designated or approved location and be representative of the monitored activity.
 - a. Monitoring shall be conducted according to procedures approved under Title 40 Code of Federal Regulations Part 136 or alternative methods approved by the U.S. Environmental Protection Agency, unless other procedures have been specified in this permit.
 - b. The permittee shall periodically calibrate and perform maintenance procedures on all monitoring and analytical instrumentation at intervals that will insure accuracy of measurements.
 - c. Samples taken shall be analyzed in accordance with 1VAC30-45, Certification for Noncommercial Environmental Laboratories, or 1VAC30-46, Accreditation for Commercial Environmental Laboratories.
2. Any pollutant specifically addressed by this permit that is sampled or measured at the permit designated or approved location more frequently than required by this permit shall meet the requirements in A 1 a through c above and the results of this monitoring shall be included in the calculations and reporting required by this permit.
3. Operational or process control samples or measurements shall not be taken at the designated permit sampling or measurement locations. Operational or process control samples or measurements do not need to follow procedures approved under Title 40 Code of Federal Regulations Part 136 or be analyzed in accordance with 1VAC30-45, Certification for Noncommercial Environmental Laboratories, or 1VAC30-46, Accreditation for Commercial Environmental Laboratories.

B. Records

1. Records of monitoring information shall include:
 - a. The date, exact place, and time of sampling or measurements;
 - b. The individual(s) who performed the sampling or measurements;
 - c. The date(s) and time(s) analyses were performed;
 - d. The individual(s) who performed the analyses;
 - e. The analytical techniques or methods used; and
 - f. The results of such analyses.
2. Except for records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years, the permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report or application. This period of retention shall be extended automatically during the course of any unresolved litigation regarding the regulated activity or regarding control standards applicable to the permittee, or as requested by the Board.

C. Reporting Monitoring Results

1. The permittee shall submit the results of the monitoring required by this permit not later than the 10th day of the month after monitoring takes place, unless another reporting schedule is specified elsewhere in this permit.

Monitoring results shall be submitted to:

Department of Environmental Quality – Northern Regional Office (DEQ-NRO)
13901 Crown Court
Woodbridge, VA 22193

2. Monitoring results shall be reported on a Discharge Monitoring Report (DMR) or on forms provided, approved or specified by the Department.
3. Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in this permit.

D. Duty to Provide Information

The permittee shall furnish to the Department, within a reasonable time, any information which the Board may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The Board may require the permittee to furnish, upon request, such plans, specifications, and other pertinent information as may be necessary to determine the effect of the wastes from this discharge on the quality of state waters, or such other information as may be necessary to accomplish the purposes of the State Water Control Law. The permittee shall also furnish to the Department upon request, copies of records required to be kept by this permit.

E. Compliance Schedule Reports

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.

F. Unauthorized Discharges

Except in compliance with this permit, or another permit issued by the Board, it shall be unlawful for any person to:

1. Discharge into state waters sewage, industrial wastes, other wastes, or any noxious or deleterious substances; or
2. Otherwise alter the physical, chemical or biological properties of such state waters and make them detrimental to the public health, or to animal or aquatic life, or to the use of such waters for domestic or industrial consumption, or for recreation, or for other uses.

G. Reports of Unauthorized Discharges

Any permittee who discharges or causes or allows a discharge of sewage, industrial waste, other wastes or any noxious or deleterious substance into or upon state waters in violation of Part II.F.; or who discharges or causes or allows a discharge that may reasonably be expected to enter state waters in violation of Part II.F., shall notify the Department of the discharge immediately upon discovery of the discharge, but in no case later than 24 hours after said discovery. A written report of the unauthorized discharge shall be submitted to the Department, within five days of discovery of the discharge. The written report shall contain:

1. A description of the nature and location of the discharge;
2. The cause of the discharge;
3. The date on which the discharge occurred;
4. The length of time that the discharge continued;
5. The volume of the discharge;
6. If the discharge is continuing, how long it is expected to continue;
7. If the discharge is continuing, what the expected total volume of the discharge will be; and

8. Any steps planned or taken to reduce, eliminate and prevent a recurrence of the present discharge or any future discharges not authorized by this permit.

Discharges reportable to the Department under the immediate reporting requirements of other regulations are exempted from this requirement.

H. Reports of Unusual or Extraordinary Discharges

If any unusual or extraordinary discharge including a bypass or upset should occur from a treatment works and the discharge enters or could be expected to enter state waters, the permittee shall promptly notify, in no case later than 24 hours, the Department by telephone after the discovery of the discharge. This notification shall provide all available details of the incident, including any adverse affects on aquatic life and the known number of fish killed. The permittee shall reduce the report to writing and shall submit it to the Department within five days of discovery of the discharge in accordance with Part II.I.2. Unusual and extraordinary discharges include but are not limited to any discharge resulting from:

1. Unusual spillage of materials resulting directly or indirectly from processing operations;
2. Breakdown of processing or accessory equipment;
3. Failure or taking out of service some or all of the treatment works; and
4. Flooding or other acts of nature.

I. Reports of Noncompliance

The permittee shall report any noncompliance which may adversely affect state waters or may endanger public health.

1. An oral report shall be provided within 24 hours from the time the permittee becomes aware of the circumstances. The following shall be included as information which shall be reported within 24 hours under this paragraph:
 - a. Any unanticipated bypass; and
 - b. Any upset which causes a discharge to surface waters.
2. A written report shall be submitted within 5 days and shall contain:
 - a. A description of the noncompliance and its cause;
 - b. The period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and
 - c. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

The Board may waive the written report on a case-by-case basis for reports of noncompliance under Part II.I. if the oral report has been received within 24 hours and no adverse impact on state waters has been reported.

3. The permittee shall report all instances of noncompliance not reported under Parts II, I.1. or I.2., in writing, at the time the next monitoring reports are submitted. The reports shall contain the information listed in Part II.I.2.

NOTE: The immediate (within 24 hours) reports required in Parts II, G., H. and I. may be made to the Department's Northern Regional Office at (703) 583-3800 or online at

<http://www.deq.virginia.gov/Programs/PollutionResponsePreparedness/MakingaReport.aspx>.

For reports outside normal working hours, leave a message and this shall fulfill the immediate reporting requirement. For emergencies, the Virginia Department of Emergency Services maintains a 24-hour telephone service at 1-800-468-8892.

J. Notice of Planned Changes

1. The permittee shall give notice to the Department as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:
 - a. The permittee plans alteration or addition to any building, structure, facility, or installation from which there is or may be a discharge of pollutants, the construction of which commenced:
 - 1) After promulgation of standards of performance under Section 306 of Clean Water Act which are applicable to such source; or
 - 2) After proposal of standards of performance in accordance with Section 306 of Clean Water Act which are applicable to such source, but only if the standards are promulgated in accordance with Section 306 within 120 days of their proposal;
 - b. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations nor to notification requirements specified elsewhere in this permit; or
 - c. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.
2. The permittee shall give advance notice to the Department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

K. Signatory Requirements

1. Applications. All permit applications shall be signed as follows:
 - a. For a corporation: by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means:
 - 1) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or
 - 2) The manager of one or more manufacturing, production, or operating facilities, provided the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;
 - b. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or
 - c. For a municipality, state, federal, or other public agency: by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a public agency includes:
 - 1) The chief executive officer of the agency, or
 - 2) A senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.

2. Reports, etc. All reports required by permits, and other information requested by the Board shall be signed by a person described in Part II.K.1., or by a duly authorized representative of that person. A person is a duly authorized representative only if:
 - a. The authorization is made in writing by a person described in Part II.K.1.;
 - b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.); and
 - c. The written authorization is submitted to the Department.
3. Changes to authorization. If an authorization under Part II.K.2. is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Part II.K.2. shall be submitted to the Department prior to or together with any reports, or information to be signed by an authorized representative.
4. Certification. Any person signing a document under Parts II, K.1. or K.2. shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

L. Duty to Comply

The permittee shall comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the State Water Control Law and the Clean Water Act, except that noncompliance with certain provisions of this permit may constitute a violation of the State Water Control Law but not the Clean Water Act. Permit noncompliance is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

The permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under Section 405(d) of the Clean Water Act within the time provided in the regulations that establish these standards or prohibitions or standards for sewage sludge use or disposal, even if this permit has not yet been modified to incorporate the requirement.

M. Duty to Reapply

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee shall apply for and obtain a new permit. All permittees with a currently effective permit shall submit a new application at least 180 days before the expiration date of the existing permit, unless permission for a later date has been granted by the Board. The Board shall not grant permission for applications to be submitted later than the expiration date of the existing permit.

N. Effect of a Permit

This permit does not convey any property rights in either real or personal property or any exclusive privileges, nor does it authorize any injury to private property or invasion of personal rights, or any infringement of federal, state or local law or regulations.

O. State Law

Nothing in this permit shall be construed to preclude the institution of any legal action under, or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any other state law or regulation or under authority preserved by Section 510 of the Clean Water Act. Except as provided in permit conditions on "bypassing" (Part II.U.), and "upset" (Part II.V.) nothing in this permit shall be construed to relieve the permittee from civil and criminal penalties for noncompliance.

P. Oil and Hazardous Substance Liability

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Sections 62.1-44.34:14 through 62.1-44.34:23 of the State Water Control Law.

Q. Proper Operation and Maintenance

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes effective plant performance, adequate funding, adequate staffing, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by the permittee only when the operation is necessary to achieve compliance with the conditions of this permit.

R. Disposal of Solids or Sludges

Solids, sludges or other pollutants removed in the course of treatment or management of pollutants shall be disposed of in a manner so as to prevent any pollutant from such materials from entering state waters.

S. Duty to Mitigate

The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

T. Need to Halt or Reduce Activity not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

U. Bypass

1. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of Parts II, U.2. and U.3.
2. Notice
 - a. Anticipated bypass. If the permittee knows in advance of the need for a bypass, prior notice shall be submitted, if possible at least ten days before the date of the bypass.
 - b. Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in Part II.I.
3. Prohibition of bypass.
 - a. Bypass is prohibited, and the Board may take enforcement action against a permittee for bypass, unless:
 - 1) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

- 2) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
 - 3) The permittee submitted notices as required under Part II.U.2.
- b. The Board may approve an anticipated bypass, after considering its adverse effects, if the Board determines that it will meet the three conditions listed above in Part II.U.3.a.

V. Upset

1. An upset constitutes an affirmative defense to an action brought for noncompliance with technology based permit effluent limitations if the requirements of Part II.V.2. are met. A determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is not a final administrative action subject to judicial review.
2. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - a. An upset occurred and that the permittee can identify the cause(s) of the upset;
 - b. The permitted facility was at the time being properly operated;
 - c. The permittee submitted notice of the upset as required in Part II.I.; and
 - d. The permittee complied with any remedial measures required under Part II.S.
3. In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.

W. Inspection and Entry

The permittee shall allow the Director, or an authorized representative, upon presentation of credentials and other documents as may be required by law, to:

1. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
3. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
4. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act and the State Water Control Law, any substances or parameters at any location.

For purposes of this section, the time for inspection shall be deemed reasonable during regular business hours, and whenever the facility is discharging. Nothing contained herein shall make an inspection unreasonable during an emergency.

X. Permit Actions

Permits may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

Y. Transfer of permits

1. Permits are not transferable to any person except after notice to the Department. Except as provided in Part II.Y.2., a permit may be transferred by the permittee to a new owner or operator only if the permit has been modified or revoked and reissued, or a minor modification made, to identify the new permittee and incorporate such other requirements as may be necessary under the State Water Control Law and the Clean Water Act.
2. As an alternative to transfers under Part II.Y.1., this permit may be automatically transferred to a new permittee if:
 - a. The current permittee notifies the Department at least 30 days in advance of the proposed transfer of the title to the facility or property;
 - b. The notice includes a written agreement between the existing and new permittees containing a specific date for transfer of permit responsibility, coverage, and liability between them; and
 - c. The Board does not notify the existing permittee and the proposed new permittee of its intent to modify or revoke and reissue the permit. If this notice is not received, the transfer is effective on the date specified in the agreement mentioned in Part II.Y.2.b.

Z. Severability

The provisions of this permit are severable, and if any provision of this permit or the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

STORMWATER MANAGEMENT CONDITIONS AND REQUIREMENTS

A. Stormwater Pollution Prevention Plan

The existing stormwater pollution prevention plan (SWPPP) shall be reviewed and modified, as appropriate, to conform to the requirements of this section. The plan shall identify potential sources of pollution that may reasonably be expected to affect the quality of stormwater discharges associated with industrial activity from the facility. In addition, the plan shall describe and ensure the implementation of practices that are to be utilized to reduce the pollutants in stormwater discharges associated with industrial activity at the facility and to assure compliance with the terms and conditions of this permit. Permittees must implement the provisions of the stormwater pollution prevention plan as a condition of this permit.

The stormwater pollution prevention plan requirements of this permit may be fulfilled by incorporating, by reference, other plans or documents such as an erosion and sediment control plan, a spill prevention control and countermeasure (SPCC) plan developed for the facility under Section 311 of the Clean Water Act or best management practices (BMP) programs otherwise required for the facility provided that the incorporated plan meets or exceeds the plan requirements of Part III.I. If an erosion and sediment control plan is being incorporated by reference, it shall have been approved by the locality in which the activity is to occur or by another appropriate plan approving authority authorized under the Virginia Erosion and Sediment Control Regulation 9VAC25-840 et seq. All plans incorporated by reference into the stormwater pollution prevention plan become enforceable under this permit.

The contents of the SWPPP shall comply with the requirements listed in Part III.I.

B. Non-Stormwater Discharges

1. The following non-stormwater discharges are authorized by this permit:

- a. Discharges from fire fighting activities;
- b. Fire hydrant flushings;
- c. Potable water including water line flushings;
- d. Uncontaminated air conditioning or compressor condensate;
- e. Irrigation drainage;
- f. Landscape watering provided all pesticides, herbicides and fertilizers have been applied in accordance with manufacturer's instructions;
- g. Pavement washwaters where no detergents are used and no spills or leaks of toxic or hazardous materials have occurred (unless all spilled material has been removed);
- h. Routine external building wash down which does not use detergents;
- i. Uncontaminated groundwater or spring water;
- j. Foundation or footing drains where flows are not contaminated with process materials;
- k. Incidental windblown mist from cooling towers that collects on rooftops or adjacent portions of the facility but NOT intentional discharges from the cooling tower (e.g., "piped" cooling tower blowdown or drains).

2. Discharges of certain sources of non-stormwater are allowable discharges under this permit provided the permittee includes the following information in the SWPPP:

- a. Identification of each allowable non-stormwater source, except for flows from fire fighting activities;

- b. The location where the non-stormwater is likely to be discharged; and
 - c. Descriptions of appropriate best management practices (BMPs) for each source.
3. If mist blown from cooling towers is included as one of the allowable non-stormwater discharges from the facility, the permittee shall specifically evaluate the discharge for the presence of chemicals used in the cooling tower. The evaluation shall be included in the SWPPP.
4. The following non-stormwater discharges are specifically not authorized by this permit:
- a. Discharges of stormwater from areas where there may be contact with chemical formulations sprayed to provide surface protection.
 - b. Discharges of leachate, gas collection condensate, drained free liquids, contaminated groundwater, laboratory derived wastewater and contact washwater from washing truck and railcar exteriors and surface areas that have come in direct contact with solid waste at the landfill facility.

C. Releases of Hazardous Substances or Oil in Excess of Reportable Quantities

The discharge of hazardous substances or oil in the stormwater discharge(s) from the facility shall be prevented or minimized in accordance with the stormwater pollution prevention plan for the facility. This permit does not authorize the discharge of hazardous substances or oil resulting from an onsite spill. This permit does not relieve the permittee of the reporting requirements of 40 CFR 110, 40 CFR 117 and 40 CFR 302 or § 62.1-44.34:19 of the Code of Virginia. Where a release containing a hazardous substance or oil in an amount equal to or in excess of a reportable quantity established under either 40 CFR 110, 40 CFR 117 or 40 CFR 302 occurs during a 24-hour period:

- 1. The permittee is required to notify the DEQ in accordance with the requirements of Part II.G as soon as he or she has knowledge of the discharge;
- 2. Where a release enters a municipal separate storm sewer system (MS4), the permittee shall also notify the owner or the MS4; and
- 3. The stormwater pollution prevention plan required by this permit shall be reviewed to identify measures to prevent the reoccurrence of such releases and to respond to such releases and the plan shall be modified where appropriate.

D. Discharges of Industrial Stormwater to Waters Subject to TMDL Wasteload Allocations

- 1. Facilities in the Chesapeake Bay watershed.
 - a. Owners of facilities in the Chesapeake Bay watershed shall monitor their industrial stormwater discharges for total suspended solids (TSS), total nitrogen (TN) and total phosphorus (TP) to characterize the contributions from their facility's specific industrial sector for these parameters. Samples shall be collected during each of the first four monitoring periods (i.e., the first two years of permit coverage). Monitoring periods are specified in Part I.A. Samples shall be collected and analyzed in accordance with Part I.A. Monitoring results shall be reported in accordance with Part I.A, Part II.C and retained in accordance with Part II.B.
 - b. Chesapeake Bay TMDL wasteload allocations and Chesapeake Bay TMDL action plans.
 - (1) EPA's Chesapeake Bay TMDL (December 29, 2010) includes wasteload allocations for VPDES permitted industrial stormwater facilities as part of the regulated stormwater aggregate load. EPA used data submitted by Virginia with the Phase I Chesapeake Bay TMDL Watershed Implementation Plan, including the number of industrial stormwater permits per county and the number of urban acres regulated by industrial stormwater permits, as part of their development of the aggregate load. Aggregate loads for industrial stormwater facilities were appropriate because actual facility loading data were not available to develop individual facility wasteload allocations.

Virginia estimated the loadings from industrial stormwater facilities using actual and estimated facility acreage information and TP, TN, and TSS loading values from the Northern Virginia Planning District Commission (NVPDC) Guidebook for Screening Urban Nonpoint Pollution Management Strategies, prepared for the Metropolitan Washington Council of Governments. Annandale, VA. November, 1979.

The loading values used were as follows:

TP – High (80%) imperviousness industrial; 1.5 lb/ac/yr

TN – High (80%) imperviousness industrial; 12.3 lb/ac/yr

TSS – High (80%) imperviousness industrial; 440 lb/ac/yr

The actual facility area information and the TP, TN and TSS data collected for this permit will be used by DEQ to quantify the nutrient and sediment loads from VPDES permitted industrial stormwater facilities and will be submitted to EPA to aid them in further refinements to their Chesapeake Bay TMDL model. The loading information will also be used by DEQ to determine any additional load reductions needed for industrial stormwater facilities for the next reissuance of this permit.

- (2) Data analysis and Chesapeake Bay TMDL action plans. The permittee shall analyze the nutrient and sediment data collected in accordance with Part III.D.1.a. to determine if additional action is needed for this permit term. The permittee shall average the data collected at the facility for each of the pollutants of concern (POC) (e.g., TP, TN and TSS) and compare the results to the loading values for TP, TN and TSS presented in Part III.D.1.b.(1). To calculate the facility loadings, the permittee shall use either the actual annual average rainfall data for the facility location (in inches/year) or the Virginia annual average rainfall of 44.3 inches/year.

The following formula or a site specific, DEQ-approved calculation shall be used to determine the loading value:

$$L = 0.226 \times R \times C \quad \text{Equation (1)}$$

where:

L = the Pollutant of Concern (POC) loading value (lb/acre/year)

C = the POC average concentration of all facility samples (mg/L)

0.226 = unit conversion factor

R = annual runoff (in/yr), calculated as: $R = P \times P_j \times R_v$

where:

P = annual rainfall (in/yr) [use the Virginia annual average of 44.3 in/yr, or site specific annual rainfall for your area of the State]

P_j = the fraction of annual events that produce runoff (usually 0.9)

R_v = the runoff coefficient, which can be expressed as: $R_v = 0.05 + (0.9 \times I_a)$

I_a = the impervious fraction [the ratio of facility impervious area to the total facility area] or $I_a = \text{AREA}_{(\text{IMPERVIOUS})} / \text{AREA}_{(\text{TOTAL})}$

Substituting in Equation (1):

$$L = 0.226 \times P \times P_j \times (0.05 + (0.9 \times I_a)) \times C \quad \text{Equation (2)}$$

- (3) If the calculated facility loading value for TP, TN or TSS is less than the corresponding loading value presented in subdivision Part III.D.1.b.(1), then the calculations demonstrating that no reduction is necessary shall be submitted within 90 days from the end of the second year's monitoring period.

The calculations shall include a site map with the total site area, the areas associated with industrial activity and the total impervious area.

If the calculated facility loading value for TP, TN or TSS exceeds the corresponding loading value presented in Part III.D.1.b.(1), then the permittee shall develop and submit a Chesapeake Bay TMDL Action Plan to DEQ for review and approval. The plan shall include a site map with the total site area, the areas associated with industrial activity and the total impervious area. The permittee shall implement the applicable elements of the approved plan over the remaining term of this permit and achieve all the necessary reductions by June 30, 2024. The plan shall be submitted within 90 days from the end of the second year's monitoring period.

The action plan shall include:

- (a) A determination of the total pollutant load reductions for TP, TN and TSS (as appropriate) necessary to reduce the annual loads from industrial activities. This shall be determined by calculating the difference between the loading values listed in Part III.D.1.b.(1) and the average of the sampling data for TP, TN or TSS (as appropriate) for the entire facility. The reduction applies to the total difference calculated for each pollutant of concern;
- (b) The means and methods, such as management practices and retrofit programs, that will be utilized to meet the required reductions determined in (a) above and a schedule to achieve those reductions by June 30, 2024. The schedule should include annual benchmarks to demonstrate the ongoing progress in meeting those reductions;
- (c) The permittee may consider utilization of any pollutant trading or offset program in accordance with §§ 62.1-44.19:20 through 62.1-44.19:23 of the Code of Virginia, governing trading and offsetting, to meet the required reductions.
- (d) Permittees required to develop and implement a Chesapeake Bay TMDL Action Plan shall submit an annual report to the department by June 30th of each year describing the progress in meeting the required reductions.

E. Discharges Through a Regulated MS4 to Waters Subject to the Chesapeake Bay TMDL

In addition to the requirements of this permit, any facility with industrial activity discharges through a regulated MS4 that is notified by the MS4 operator that the locality has adopted ordinances to meet the Chesapeake Bay TMDL shall incorporate measures and controls into their SWPPP to comply with applicable local TMDL ordinance requirements.

F. Expansion of Facilities that Discharge to Waters Subject to the Chesapeake Bay TMDL

Virginia's Phase I Chesapeake Bay TMDL Watershed Implementation Plan (29 November 2010), states that the wasteloads from any expansion of an existing permitted facility discharging stormwater in the Chesapeake Bay watershed cannot exceed the nutrient and sediment loadings that were discharged from the expanded portion of the land prior to the land being developed for the expanded industrial activity.

1. For any industrial activity area expansions (i.e., construction activities, including clearing, grading and excavation activities) that commence on or after 1 July 2014 (the effective date of this permit), the permittee shall document in the SWPPP the information and calculations used to determine the nutrient and sediment loadings discharged from the expanded land area prior to the land being developed and the measures and controls that were employed to meet the no net increase of stormwater nutrient and sediment load as a result of the expansion of the industrial activity. Any land disturbance that is exempt from permitting under the VPDES construction stormwater general permit regulation (9VAC25-880) is exempt from this requirement.
2. The permittee may use the VSMP water quality design criteria to meet the requirements of subdivision "1" of this subsection. Under these criteria, the total phosphorus load shall not exceed the greater of: (i) the total phosphorus load that was discharged from the expanded portion of the land prior to the land being developed for the industrial activity or (ii) 0.41 pounds per acre per year. Compliance with the water quality design criteria may be determined utilizing the Virginia Runoff Reduction Method or another equivalent methodology approved by the Board. Design specifications and pollutant removal efficiencies for specific BMPs can be found on the Virginia Stormwater BMP Clearinghouse website at <http://www.vwrrc.vt.edu/swc>.

3. The permittee may consider utilization of any pollutant trading or offset program in accordance with §§ 62.1-44.19:20 through 62.1-44.19:23 of the Code of Virginia, governing trading and offsetting to meet the no net increase requirement.

G. Water Quality Protection

The discharges authorized by this permit shall be controlled as necessary to meet applicable water quality standards. The permittee shall employ an iterative, BMP-based program to select, install, implement and maintain best management practices (BMPs) at the facility designed to minimize pollutants in the stormwater discharges and to address any exceedance of any applicable water quality standard, effluent limitation or TMDL waste load allocation. DEQ expects that compliance with the conditions in this permit will control discharges as necessary to meet applicable water quality standards. If there is evidence indicating that the stormwater discharges authorized by this permit are causing, have the reasonable potential to cause or are contributing to an excursion above an applicable water quality standard, an excursion above a TMDL wasteload allocation or are causing downstream pollution (as defined in § 62.1-44.3 of the Code of Virginia), DEQ may require the permittee to take corrective action in accordance with Part III.H.1. and Part III.H.2., and include and implement appropriate controls in the SWPPP to correct the problem.

H. Corrective Actions

1. Corrective actions. The permittee must take corrective action whenever:

- a. Routine facility inspections, comprehensive site compliance evaluations, inspections by local, state or federal officials or any other process, observation or event result in a determination that modifications to the stormwater control measures are necessary to meet the permit requirements; or
- b. There is any exceedance of an effluent limitation or TMDL wasteload allocation; or
- c. The DEQ Northern Regional Office determines or the permittee becomes aware, that the stormwater control measures are not stringent enough for the discharge to meet applicable water quality standards.

The permittee must review the SWPPP and modify it as necessary to address any deficiencies. Revisions to the SWPPP must be completed within 30 days following the discovery of the deficiency. When BMPs need to be modified or added (distinct from regular preventive maintenance of existing BMPs described in Part III.I.2.), implementation must be completed before the next anticipated storm event if possible, but no later than 60 days after the deficiency is discovered, or as otherwise provided or approved by the DEQ Northern Regional Office.

In cases where construction is necessary to implement BMPs, the permittee shall include a schedule in the SWPPP that provides for the completion of the BMPs as expeditiously as practicable, but no later than three years after the deficiency is discovered. Where a construction compliance schedule is included in the SWPPP, the plan shall include appropriate nonstructural and/or temporary controls to be implemented in the affected portion(s) of the facility prior to completion of the permanent BMP. The amount of time taken to modify a BMP or implement additional BMPs shall be documented in the SWPPP.

Any corrective actions taken must be documented and retained with the SWPPP. Reports of corrective actions must be signed in accordance with Part II.K.

2. Follow-up monitoring and reporting. If at any time monitoring results indicate that discharges from the facility exceed an effluent limitation, a TMDL wasteload allocation or the DEQ Northern Regional Office determines that discharges from the facility are causing or contributing to an exceedance of a water quality standard, immediate steps shall be taken to eliminate the exceedances in accordance with the above Part III.H.1. (Corrective actions). Within 30 calendar days of implementing the relevant corrective action(s) (or during the next qualifying runoff event, should none occur within 30 calendar days) follow-up monitoring shall be undertaken to verify that the BMPs that were modified are effectively protecting water quality. Follow-up monitoring need only be conducted for pollutant(s) with prior exceedances unless there are reasons to believe that facility modifications may have reduced pollutant prevention or removal capacity for other pollutants of concern.

The follow-up monitoring data shall be submitted to the DEQ Northern Regional Office no later than 30 days after the results are received. If the follow-up monitoring value does not exceed the effluent limitation or other relevant standard, no additional follow-up monitoring is required for this corrective action.

Should the follow-up monitoring indicate that the effluent limitation, TMDL wasteload allocation, water quality standard or other relevant standard is still being exceeded; an exceedance report shall be submitted to the DEQ Northern Regional Office no later than 30 days after the follow-up monitoring results are received. The following information must be included in the report: permit number; facility name, address and location; receiving water; monitoring data from this and the preceding monitoring event(s); an explanation of the situation; description of what has been done and the intended actions (should the corrective actions not yet be complete) to further reduce pollutants in the discharge; and an appropriate contact name and phone number. Additional follow-up monitoring shall be continued at an appropriate frequency, but no less often than quarterly, until the discharge no longer exceeds the standard.

I. Stormwater Pollution Prevention Plan Requirements

A stormwater pollution prevention plan (SWPPP) is required to be implemented for the facility. The plan shall include best management practices (BMPs) that are reasonable, economically practicable and appropriate in light of current industry practices.

The BMPs shall be selected, designed, installed, implemented and maintained in accordance with good engineering practices to eliminate or reduce the pollutants in all stormwater discharges from the facility. The plan shall also include any control measures necessary for the stormwater discharges to meet applicable water quality standards.

Permittees shall implement the provisions of the stormwater pollution prevention plan as a condition of this permit.

The stormwater pollution prevention plan requirements of this permit may be fulfilled, in part, by incorporating by reference other plans or documents such as a spill prevention control and countermeasure (SPCC) plan developed for the facility under Section 311 of the Clean Water Act, or best management practices (BMP) programs otherwise required for the facility, provided that the incorporated plan meets or exceeds the plan requirements of Part III.I.1. (Contents of the Plan). All plans incorporated by reference into the stormwater pollution prevention plan become enforceable under this permit. If a plan incorporated by reference does not contain all required elements of the SWPPP of Part III.I.1., the permittee shall develop the missing SWPPP elements and include them in the required plan.

1. Contents of the Plan

The contents of the SWPPP shall comply with the requirements listed below. The plan shall include, at a minimum, the following items:

- a. **Pollution Prevention Team.** The plan shall identify the staff individuals by name or title that comprises the facility's stormwater pollution prevention team. The pollution prevention team is responsible for assisting the facility or plant manager in developing, implementing, maintaining, revising and ensuring compliance with the facility's SWPPP. Specific responsibilities of each staff individual on the team shall be identified and listed.
- b. **Site Description.** The plan shall include the following:
 - (1) **Activities at the Facility.** A description of the nature of the industrial activities at the facility.
 - (2) **General Location Map.** A general location map (e.g., USGS quadrangle or other map) with enough detail to identify the location of the facility and the receiving waters within one mile of the facility.
 - (3) **Site Map.** A site map identifying the following:
 - (a) The size of the property (in acres);

- (b) The location and extent of significant structures and impervious surfaces (roofs, paved areas and other impervious areas);
 - (c) Locations of all stormwater conveyances; including: ditches, pipes, swales and inlets and the directions of stormwater flow (use arrows to show which ways stormwater will flow);
 - (d) Locations of all existing structural and source control BMPs;
 - (e) Locations of all surface water bodies, including wetlands;
 - (f) Locations of potential pollutant sources identified under Part III.I.1.c.;
 - (g) Locations where significant spills or leaks identified under Part III.I.1.d have occurred;
 - (h) Locations of the following activities where such activities are exposed to precipitation: fueling stations; vehicle and equipment maintenance and/or cleaning areas; loading/unloading areas; locations used for the treatment, storage or disposal of wastes; liquid storage tanks; processing and storage areas; access roads, rail cars and tracks; transfer areas for substances in bulk; and machinery;
 - (i) Locations of stormwater outfalls (to include geographical coordinates indicating the monitoring point), an approximate outline of the area draining to each outfall, and the location of municipal storm sewer systems (if the stormwater from the facility discharges to them);
 - (j) Location and description of all non-stormwater discharges;
 - (k) Location of any storage piles containing salt used for deicing or other commercial or industrial purposes; and
 - (l) Locations and sources of runoff to the site from adjacent property, where the runoff contains significant quantities of pollutants. The permittee shall include an evaluation with the SWPPP of how the quality of the stormwater running onto the facility impacts the facility's stormwater discharges.
- (4) Receiving Waters and Wetlands. The name of all surface waters receiving discharges from the site, including intermittent streams, dry sloughs and arroyos. Provide a description of wetland sites that may receive discharges from the facility. If the facility discharges through a municipal separate storm sewer system (MS4), identify the MS4 operator and the receiving water to which the MS4 discharges.
- c. Summary of Potential Pollutant Sources. The plan shall identify each separate area at the facility where industrial materials or activities are exposed to stormwater. Industrial materials or activities include, but are not limited to: material handling equipment or activities, industrial machinery, raw materials, industrial production and processes, intermediate products, byproducts, final products and waste products. Material handling activities include, but are not limited to: the storage, loading and unloading, transportation, disposal or conveyance of any raw material, intermediate product, final product or waste product. For each separate area identified, the description shall include:
- (1) Activities in Area. A list of the activities (e.g., material storage, equipment fueling and cleaning, cutting steel beams); and
 - (2) Pollutants. A list of all associated pollutant(s) or pollutant constituents (e.g., crankcase oil, zinc, sulfuric acid, cleaning solvents etc.) for each activity. The pollutant list shall include all significant materials handled, treated, stored or disposed that have been exposed to stormwater in the three years prior to the date this SWPPP was prepared or amended. The list shall include any hazardous substances or oil at the facility.

- d. **Spills and Leaks.** The SWPPP shall clearly identify areas where potential spills and leaks that can contribute pollutants to stormwater discharges can occur and their corresponding outfalls. The plan shall include a list of significant spills and leaks of toxic or hazardous pollutants that actually occurred at exposed areas or that drained to a stormwater conveyance during the three-year period prior to the date this SWPPP was prepared or amended. The list shall be updated if significant spills or leaks occur in exposed areas of the facility during the term of the permit. Significant spills and leaks include releases of oil or hazardous substances in excess of reportable quantities and may also include releases of oil or hazardous substances that are not in excess of reporting requirements.
- e. **Sampling Data.** The plan shall include a summary of existing stormwater discharge sampling data taken at the facility. The summary shall include, at a minimum, any data collected during the previous permit term.
- f. **Stormwater Controls.**
 - (1) BMPs shall be implemented for all the areas identified in Part III.I.1.c. (Summary of Potential Pollutant Sources) to prevent or control pollutants in stormwater discharges from the facility. All reasonable steps shall be taken to control or address the quality of discharges from the site that may not originate at the facility.

The SWPPP shall describe the type, location and implementation of all BMPs for each area where industrial materials or activities are exposed to stormwater. Selection of BMPs shall take into consideration:

- (a) That preventing stormwater from coming into contact with polluting materials is generally more effective, and less costly, than trying to remove pollutants from stormwater;
 - (b) BMPs generally shall be used in combination with each other for most effective water quality protection;
 - (c) Assessing the type and quantity of pollutants, including their potential to impact receiving water quality, is critical to designing effective control measures;
 - (d) That minimizing impervious areas at the facility can reduce runoff and improve groundwater recharge and stream base flows in local streams (however, care must be taken to avoid groundwater contamination);
 - (e) Flow attenuation by use of open vegetated swales and natural depressions can reduce instream impacts of erosive flows;
 - (f) Conservation or restoration of riparian buffers will help protect streams from stormwater runoff and improve water quality; and
 - (g) Treatment interceptors (e.g., swirl separators and sand filters) may be appropriate in some instances to minimize the discharge of pollutants.
- 2) **Control Measures.** The permittee shall implement the following types of BMPs to prevent and control pollutants in the stormwater discharges from the facility, unless it can be demonstrated and documented that such controls are not relevant to the discharges (e.g., there are no storage piles containing salt).
 - (a) **Good Housekeeping.** The permittee shall keep clean all exposed areas of the facility that are potential sources of pollutants to stormwater discharges. Typical problem areas include areas around trash containers, storage areas, loading docks and vehicle fueling and maintenance areas. The plan shall include a schedule for regular pickup and disposal of waste materials, along with routine inspections for leaks and conditions of drums, tanks and containers. The introduction of raw, final or waste materials to exposed areas of the facility shall be minimized to the maximum

extent practicable. The generation of dust, along with off-site vehicle tracking of raw, final or waste materials or sediments shall be minimized to the maximum extent practicable.

- (b) **Eliminating and Minimizing Exposure.** To the extent practicable, industrial materials and activities shall be located inside, or protected by a storm-resistant covering to prevent exposure to rain, snow, snowmelt and runoff. Note: Eliminating exposure at all industrial areas may make the facility eligible for the "Conditional Exclusion for No Exposure" provision of 9VAC25-31-120.E., thereby eliminating the need to have a permit.
- (c) **Preventive Maintenance.** The permittee shall have a preventive maintenance program that includes regular inspection, testing, maintenance and repairing of all industrial equipment and systems to avoid breakdowns or failures that could result in leaks, spill and other releases. This program is in addition to the specific BMP maintenance required under Part III.I.2. (Maintenance of BMPs).
- (d) **Spill Prevention and Response Procedures.** The plan shall describe the procedures that will be followed for preventing and responding to spills and leaks.
 - (1) Preventive measures include barriers between material storage and traffic areas, secondary containment provisions and procedures for material storage and handling.
 - (2) Response procedures shall include notification of appropriate facility personnel, emergency agencies and regulatory agencies and procedures for stopping, containing and cleaning up spills.

Measures for cleaning up hazardous material spills or leaks shall be consistent with applicable Resource Conservation and Recovery Act (RCRA) regulations at 40 CFR Part 264 and 40 CFR Part 265. Employees who may cause, detect or respond to a spill or leak shall be trained in these procedures and have necessary spill response equipment available. If possible, one of these individuals shall be a member of the Pollution Prevention Team.

- (3) Contact information for individuals and agencies that must be notified in the event of a spill shall be included in the SWPPP and in other locations where it will be readily available.
- (e) **Routine Facility Inspections.** Facility personnel who possess the knowledge and skills to assess conditions and activities that could impact stormwater quality at the facility and who can also evaluate the effectiveness of BMPs, shall regularly inspect all areas of the facility where industrial materials or activities are exposed to stormwater.

These inspections are in addition to, or as part of, the comprehensive site evaluation required under Part III.I.3. At least one member of the Pollution Prevention Team shall participate in the routine facility inspections.

The inspection frequency shall be specified in the plan based upon a consideration of the level of industrial activity at the facility, but shall be a minimum of quarterly unless more frequent intervals are specified elsewhere in the permit or written approval is received from the Department for less frequent intervals. At least once each calendar year, the routine facility inspection must be conducted during a period when a stormwater discharge is occurring.

Any deficiencies in the implementation of the SWPPP that are found shall be corrected as soon as practicable, but not later than within 30 days of the inspection, unless permission for a later date is granted in writing by the Director. The results of the inspections shall be documented in the SWPPP, along with the date(s) and description(s) of any corrective actions that were taken in response to any deficiencies or opportunities for improvement that were identified.

- (f) **Employee Training.** The permittee shall implement a stormwater employee training program for the facility. The SWPPP shall include a schedule for all types of necessary training and shall document all training sessions and the employees who received the training.

Training shall be provided for all employees who work in areas where industrial materials or activities are exposed to stormwater and for employees who are responsible for implementing activities identified in the SWPPP (e.g., inspectors, maintenance personnel etc.). The training shall cover the components and goals of the SWPPP and include such topics as spill response, good housekeeping, material management practices, BMP operation and maintenance etc. The SWPPP shall include a summary of any training performed.

- (g) Sediment and Erosion Control. The plan shall identify areas at the facility that, due to topography, land disturbance (e.g. construction, landscaping, site grading) or other factors, have a potential for soil erosion. The permittee shall identify and implement structural, vegetative and/or stabilization BMPs to prevent or control on-site and off-site erosion and sedimentation. Flow velocity dissipation devices shall be placed at discharge locations and along the length of any outfall channel if the flows would otherwise create erosive conditions.
- (h) Management of Runoff. The plan shall describe the stormwater runoff management practices (i.e., permanent structural BMPs) for the facility. These types of BMPs are typically used to divert, infiltrate, reuse or otherwise reduce pollutants in stormwater discharges from the site. Structural BMPs may require a separate permit under § 404 of the CWA and the Virginia Water Protection Permit Program Regulation (9VAC25-210) before installation begins.

2. Maintenance

All BMPs identified in the SWPPP shall be maintained in effective operating condition. Stormwater BMPs identified in the SWPPP shall be observed during active operation (i.e., during a stormwater runoff event) to ensure that they are functioning correctly. Where discharge locations are inaccessible, nearby downstream locations shall be observed. The observations shall be documented in the SWPPP.

The SWPPP shall include a description of procedures and a regular schedule for preventive maintenance of all BMPs, and shall include a description of the back-up practices that are in place should a runoff event occur while a BMP is off-line. The effectiveness of nonstructural BMPs shall also be maintained by appropriate means (e.g., spill response supplies available and personnel trained etc.).

If site inspections required by Part III.I.f.(2).(e). (Routine Facility Inspections) or Part III.I.3. (Comprehensive Site Compliance Evaluation) identify BMPs that are not operating effectively, repairs or maintenance shall be performed before the next anticipated storm event. If maintenance prior to the next anticipated storm event is not possible, maintenance shall be scheduled and accomplished as soon as practicable. In the interim, back-up measures shall be employed and documented in the SWPPP until repairs or maintenance is complete.

Documentation shall be kept with the SWPPP of maintenance and repairs of BMPs, including the date(s) of regular maintenance, date(s) of discovery of areas in need of repair or replacement and for repairs, date(s) that the BMP(s) returned to full function and the justification for any extended maintenance or repair schedules.

3. Comprehensive Site Compliance Evaluation

The permittee shall conduct comprehensive site compliance evaluations at least once a year. The evaluations shall be done by qualified personnel who possess the knowledge and skills to assess conditions and activities that could impact stormwater quality at the facility and who can also evaluate the effectiveness of BMPs. The personnel conducting the evaluations may be either facility employees or outside constituents hired by the facility.

- a. Scope of the Compliance Evaluation. Evaluations shall include all areas where industrial materials or activities are exposed to stormwater, as identified in Part III.I.1.c. The personnel shall evaluate:
 - (1) Industrial materials, residue or trash that may have or could come into contact with stormwater;

- (2) Leaks or spills from industrial equipment, drums, barrels, tanks or other containers that have occurred within the past three years;
 - (3) Off-site tracking of industrial or waste materials or sediment where vehicles enter or exit the site;
 - (4) Tracking or blowing of raw, final or waste materials from areas of no exposure to exposed areas;
 - (5) Evidence of, or the potential for, pollutants entering the drainage system;
 - (6) Evidence of pollutants discharging to surface waters at all facility outfalls and the condition of and around the outfall, including flow dissipation measures to prevent scouring;
 - (7) Review of training performed, inspections completed, maintenance performed, quarterly visual examinations and effective operation of BMPs;
 - (8) Results of analytical monitoring done during the past year shall be taken into consideration during the evaluation.
- b. Based on the results of the evaluation, the SWPPP shall be modified as necessary (e.g., show additional controls on the map required by Part III.I.1.b.(3). revise the description of controls required by Part III.I.1.f. to include additional or modified BMPs designed to correct problems identified). Revisions to the SWPPP shall be completed within 30 days following the evaluation, unless permission for a later date is granted in writing by the Director.

If existing BMPs need to be modified or if additional BMPs are necessary, implementation shall be completed before the next anticipated storm event, if practicable, but not more than 60 days after completion of the comprehensive site evaluation, unless permission for a later date is granted in writing by the Department.

- c. Compliance Evaluation Report. A report shall be written summarizing the scope of the evaluation, name(s) of personnel making the evaluation, the date of the evaluation and all observations relating to the implementation of the SWPPP, including elements stipulated in Part III.I.3.a.(1) through Part III.I.3.a.(8) above.

Observations shall include such things as: the location(s) of discharges of pollutants from the site; location(s) of previously unidentified sources of pollutants; location(s) of BMPs that need to be maintained or repaired; location(s) of failed BMPs that need replacement; and location(s) where additional BMPs are needed. The report shall identify any incidents of noncompliance that were observed. Where a report does not identify any incidents of noncompliance, the report shall contain a certification that the facility is in compliance with the SWPPP and this permit. The report shall be signed in accordance with Part II.K (Signatory Requirements) of this permit and maintained with the SWPPP.

- d. Where compliance evaluation schedules overlap with routine inspections required under Part III.I.1.f.(2)(e), the annual compliance evaluation may be used as one of the routine inspections.

4. Signature and Plan Review

- a. Signature/Location. The SWPPP shall be signed in accordance with Part II.K (Signatory Requirements) of this permit, dated and retained on-site at the facility covered by this permit in accordance with Part II.B.2 (Records) of this permit. All other changes to the SWPPP, and other permit compliance documentation, must be signed and dated by the person preparing the change or documentation.
- b. Availability. The permittee shall make the SWPPP, annual site compliance evaluation report and other information available to the Department upon request.
- c. Required Modifications. The Director may notify the permittee at any time that the SWPPP, BMPs or other components of the facility's stormwater program do not meet one or more of the requirements of this permit. The notification shall identify specific provisions of the permit that are not being met and may include

required modifications to the stormwater program, additional monitoring requirements and special reporting requirements.

The permittee shall make any required changes to the SWPPP within 60 days of receipt of such notification, unless permission for a later date is granted in writing by the Director and shall submit a written certification to the Director that the requested changes have been made.

5. Maintaining an Updated SWPPP

- a. The permittee shall review and amend the SWPPP as appropriate whenever:
 - (1) There is construction or a change in design, operation, or maintenance at the facility that has a significant effect on the discharge, or the potential for the discharge, of pollutants from the facility;
 - (2) Routine inspections or compliance evaluations determine that there are deficiencies in the BMPs;
 - (3) Inspections by local, state or federal officials determine that modifications to the SWPPP are necessary;
 - (4) There is a spill, leak or other release at the facility; or
 - (5) There is an unauthorized discharge from the facility.
- b. SWPPP modifications shall be made within 30 calendar days after discovery, observation or event requiring a SWPPP modification. Implementation of new or modified BMPs (distinct from regular preventive maintenance of existing BMPs described in Part III.I.1.f.(2)(c)) shall be initiated before the next storm event if possible, but no later than 60 days after discovery or as otherwise provided or approved by the Director. The amount of time taken to modify a BMP or implement additional BMPs shall be documented in the SWPPP.
- c. If the SWPPP modification is based on a release or unauthorized discharge, include a description and date of the release, the circumstances leading to the release, actions taken in response to the release and measures to prevent the recurrence of such releases. Unauthorized releases and discharges are subject to the reporting requirements of Part II.G. (Reports of Unauthorized Discharges) of this permit.